

Haxthausen's Disease or Keratoderma Climactericum: A case report

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Podiatry Internet Journal 2 (7):2

A case report is presented describing Haxthausen's Disease or Keratoderma Climactericum. This condition is characterized by hyperkeratosis of both the palms and soles in post-menopausal women. The exact etiology of the disease is unknown, but it only occurs in women with hormonal imbalances as a result of menopause or after hysterectomy and often associated with uncontrolled hypertension. The dermatitis begins as simple keratoses that progresses and coalesces to form diffuse palmar and plantar keratoses with fissures.

Haxthausen's disease was first described in 1934.¹ The condition is associated with arthritis, obesity and hypertension in post-menopausal women. It is an acquired palmoplantar keratoderma (PPK) commonly characterized by hyperkeratosis and climactericum. The hyperkeratosis usually begins on the plantar surfaces of the feet and progress to the palms of the hands. If the condition is left untreated, the keratosis can progress to a severe dermatitis characterized by lichenification and inflammatory eczema as the result of severe pruritus and scratching. Painful fissures may also develop. The condition is difficult to diagnose, however the syndrome has been associated with a host of other conditions linked to psycho-emotional conditions, neuro-vegetative and metabolic disorders.² The condition, as presented in more recent reports in the literature, characterizes this disease as a syndrome, associated with a variation of conditions seen in post-menopausal women.

Case Report

A 75 year-old female presents on consultation in the hospital. She is admitted for primary, uncontrolled hypertension of 222/108, shortness of breath, pneumonia and sinus tachycardia. Her admitting chest x-ray revealed bilateral pleural effusions and congestive heart failure. She has no documented history of diabetes mellitus, coronary artery disease, cerebral vascular accident, transient ischemic attacks, peripheral vascular disease, thyroid disease, asthma or hypercholesterolemia. Socially, the patient is a smoker and has had previous hysterectomy. Her labs were normal, except for a high WBC count of 23,000 and a slightly elevated AST and ALT. As an incidental finding, she also presents with severe, chronic dermatitis of both the hands and feet initial diagnosed as candidiasis. (Fig. 1,2) The patient had seen a naturopath who diagnosed her with candida infection. She was given oral supplements including Bifidophilus flora. Bifidophilus flora is a probiotic supplement thought to improve and support the body's immune system. It is also reported to promote intestinal health, help to synthesize B vitamins and improve female urinary tract and vaginal health.

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Figure 1 The lesion is irregular, firm and non-moveable. It is painful to palpation and measures about 2 cm in diameter.



Figure 2 The palmar surface of the hands reveal scaling and local hyperkeratosis.

Histopathology and Treatment

A 0.5 x 0.3 cm tissue biopsy was performed from the dorsal foot. The histopathology report revealed parakeratosis, foci of significant hypergranulosis with psoriasiform epidermal hyperplasia and early, coarse bundles of collagen in vertical streaks. Superficial perivascular lymphocytic infiltration is identified. PAS stains reveal no candida or tinea. The patient was subsequently treated for pneumonia and placed on IV antibiotic therapy. Podiatry treatments consisted of local steroid creams and tissue hydration. Local triamcinolone cream 0.1% mixed with Eucerin cream (1:1 mixture) was applied to both hands and feet once daily. The patient responded well after 6 weeks of treatment. (Fig. 3)

Discussion

Parakeratosis is commonly associated with keratotic conditions of the skin, including psoriasis, eczema, chronic contact dermatitis and a host of other PPK disorders.



Figure 3 Six weeks after treatment, post inflammatory pigmentary changes are noted. The hyperkeratosis and scaling is significantly improved after treatment with local steroids and hydrating creams.

In the only other podiatry article found on the subject, Dockery, et al also identified “extensive parakeratosis without micro-abscesses such as found in psoriasis which it may resemble clinically.”² In this case, parakeratosis and psoriasiform hyperplasia with collagen hyperplasia are predominant findings. It appears perivascular lymphocytic infiltrates is another common finding with Haxthausen’s disease. The condition appears to be pruritic and the hyperkeratosis can often lead to painful, deep fissures to both the palms of the hands and soles of the feet.

Although the histologic findings are consistent with many forms of hyperkeratosis, this in itself is not diagnostic of the disease. Clinical symptoms including climactericum and hormonal imbalances, hypertension, obesity, multiple environmental hypersensitivities and even psycho-emotional conditions usually confirms the diagnosis.

The exact mechanism of the disease is not fully understood. Wines, et al, described hormonal changes at the time of menopause leading to a range of physiological disorders affecting multiple organs. It is theorized menopausal changes in hormones may alter the biomechanical properties of the skin. Certain disorders are more common in menopausal women, such as lichen sclerosus, atrophic vulvovaginitis, flushing and dysaesthetic vulvodinia. Hair and oral changes may also be associated with this condition.³

Haxthausen’s disease should not be confused with cold panniculitis in children and infants.

Treatment of the condition should include short-term and long-term improvement of skin hyperkeratosis to prevent painful fissures that can become secondarily infected. In 1986, Deschamps, et al, showed complete to total remission of hyperkeratosis in 10 patients after use of Etretnate (0.78 mg/kg/day).⁴ The use of exogenous estrogen has not been shown to improve the symptoms. In fact, Deschamps, et al, identified normal estrogen levels in 10 patients with the disease. Dockery, et al, used 10% urea and local topical steroids to control pruritus and inflammation. In this case, we found topical triamcinolone 0.1% in Eucerin cream to be very effective.

References

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